University Hospital Galway

EMERGENCY DEPARTMENT

GalwayEM.ie

Wound Management (https://galwayem.ie/guidelines/trauma-and-musculoskeletal/wound-management-0)

Category
Trauma and Musculoskeletal (https://galwayem.ie/guidelines/trauma-and-musculoskeletal)

Emergency Department staff should be specialists in wound management.

Record keeping
In the history note:

1. When the injury happened.
2. How it happened.
3. (Sometimes) Where and why it happened (especially in cases in which there may be litigation or criminal proceedings.)

In the examination, please note:

1. Type of wound e.g. laceration (blunt wound), cut (incised wound), flap (distally or proximally based) skin loss (superficial or full thickness)
2. Site of wound (be specific)
3. Size of wound e.g. length of laceration, area of abrasion
4. Depth of wound e.g. superficial, deep layers breached
5. Nature of wound - clean, dirty, infected, tidy, untidy
6. In hand lacerations, always examine and note tendon and nerve function distal to the laceration.

These may all be noted on a diagram. A picture is worth 1,000 words.

X-rays: These are used:

- To detect fractures
- To detect radio-opaque foreign bodies. All patients, in whom there is a possibility of a glass foreign body, should be x-rayed. State on the x-ray request that you are looking for a foreign body, as different exposures may be necessary. There is no point x-raying for rose thorns, as these will not show up. A skin marker at the site of the puncture wound may be helpful in locating foreign bodies. Dressings may obscure FBs on X-rays so patients should be sent to x-ray either with no dressing or else with an easily removable dressing.
- To detect joint involvement. If the patient has a deep laceration in the vicinity of a joint then a horizontal beam x-ray showing air in the joint is proof that the laceration extends into the joint

Cleaning
All wounds must be cleaned and irrigated. Tap water can be used for irrigation. Even if the wound does not need suturing it may be necessary to anaesthetise it in order to clean it properly. Grease and oil should be removed from skin with Swarfega. Excise all foreign material and dead and severely traumatised tissue.

Dirty wounds
Clean as above. It is occasionally best to leave the wound open and to review in 3 or 4 days for consideration of delayed primary suture.

Local Anaesthetic
Do not forget that the maximum dose of Lignocaine is 3 mg/kg or 20 ml of 1% (10ml of 2%) in the average male (Lignocaine with adrenaline is 7mg/kg). Use 1% Lignocaine as a routine. For wounds you expect to remain painful, you can use bupivicaine (maximum dose 2mg/kg, with adrenaline 2.5mg/kg) for a longer duration of action.

Skin Closure
The skin must be closed without tension using steristrips, tissue glue or sutures as appropriate. Usually patients will be referred back to their GP for removal of sutures. If you think that it is necessary for the patient to be seen again in the Emergency Department (eg for a complex wound) they should be referred to the review clinic

Splintage and Rest
Wounds over joints will heal faster if the joint is splinted. Patients with wounds of the leg and foot should be instructed to keep the leg elevated and patients with major wounds of the hands should be given a high sling and instruction on hand elevation.

Prophylactic Antibiotics (see also GUH Antimicrobial Prescribing Guidelines)
These are not routinely needed as debridement and cleaning is of far greater importance in the prevention of wound infection. However, they should be used in the following circumstances: -

- Grossly contaminated wounds with muscle damage should be given penicillin as prophylaxis against clostridial infection.
- Compound fractures and joint injuries. Flucloxacillin.
- Wounds in which a foreign body has been left. Flucloxacillin
- Penetrating bites (including dog, cat and human bites) and cat scratches. NB abrasions caused by a bite do not need antibiotics. Co-amoxiclav for dog & human bites. Phenoxymethylpenicillin (Penicillin V) for cat bites.
- Old wounds (>12 hours) that have been sutured.
- Wounds where cleaning may have been inadequate (e.g. puncture wounds)
